TITLE 326 AIR POLLUTION CONTROL BOARD

FIRST NOTICE OF COMMENT PERIOD
LSA Document #07-89

DEVELOPMENT OF NEW RULES CONCERNING VOLATILE ORGANIC COMPOUNDS EMISSIONS FROM PORTABLE FUEL CONTAINERS

PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) is soliciting public comment on the development of new rules concerning volatile organic compound (VOC) emissions from portable fuel containers (PFCs). IDEM seeks comment on the affected citations listed and any other provisions of Title 326 that may be affected by this rulemaking.

CITATIONS AFFECTED: 326 IAC 8.

AUTHORITY: IC 13-14-8; IC 13-17-3-4; IC 13-17-3-11; IC 13-17-3-12.

SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING

Basic Purpose and Background

Under the Clear Air Act, the United States Environmental Protection Agency (U.S. EPA) is responsible for:
(1) establishing ambient air quality standards to protect the public health and welfare;
(2) determining which areas of the country have air quality that does not meet those standards; and
(3) overseeing states' efforts to develop and implement plans to improve air quality in those areas.

The Clean Air Act establishes basic requirements and procedures for the clean air planning process, but U.S. EPA issues more specific guidance to help states, citizens, businesses, and local governments comply with the Clean Air Act's requirements. U.S. EPA also promulgates rules to meet the Clean Air Act requirements.

In the April 30, 2004, Federal Register (69 FR 23858), the U.S. EPA published air quality designations and classifications for all areas in the United States for the 8-hour ozone National Ambient Air Quality Standard (8-hour standard), including the designation of 24 Indiana counties, entirely or in part, as nonattainment with the standard. The nonattainment designations became effective on June 15, 2004. The 8-hour ozone nonattainment designations have essentially replaced the former remaining 1-hour ozone nonattainment designations. Each state must put control measures into place in order to bring these areas into attainment by June 15, 2009. Indiana has submitted several ozone redesignation requests to U.S. EPA for approval and plans to submit requests for the remaining counties in the near future. Additional VOC control measures will ensure that these counties will continue to be in compliance with the 8-hour standard for ground level ozone after they have been redesignated and will also help minimize Indiana's contribution to other states' nonattainment areas.

Because VOCs contribute to the formation of ground level ozone, it is important to control VOCs in order to comply with the 8-hour ozone standard. In an effort to assist states in the Midwest Regional Planning Organization (MRPO) in the development of state implementation plans (SIPs) to comply with the federal requirements, the Lake Michigan Air Directors Consortium (LADCO) has been working with states to identify and recommend regional controls that would help states bring areas back into attainment with the 8-hour ozone standard. The MRPO includes Illinois, Indiana, Michigan, Ohio, and Wisconsin.

The MRPO states have discussed applying certain VOC control measures to all counties in the region in order to provide a general benefit to all MRPO nonattainment areas. LADCO has evaluated potential reductions from various regulatory options that could be adopted on a multistate basis in the region. Based on discussions with other states in the MRPO and information provided by LADCO, IDEM proposes to implement a rule to reduce VOC emissions from PFCs as part of a larger regional effort. This rule is part of a larger group of VOC control rules that have been agreed to by the LADCO states to address regional ozone and particulate matter nonattainment. Other VOC control rules will include automobile refinishing, architectural and industrial maintenance (AIM) coatings, consumer products, degreasing, and stage I vapor recovery.

PFCs are designed for transporting and storing fuel from a retail distribution point to a point of use and for eventually dispensing fuel into equipment. Otherwise known as "gas cans", PFCs come in a variety of shapes and sizes and are made from either metal or plastic. PFCs are commonly used to refuel a wide variety of equipment and vehicles such as lawnmowers, chainsaws, boats, and motorcycles.

The following five design and use characteristics of PFCs result in VOC emissions:

1. VOC emissions occurring while refilling the PFC. Vapor displacement emissions result when fuel vapor is displaced from the gas can during refueling at a service station. VOC emissions from spilled gasoline also results from over-filling.
2. VOC emissions occurring during transit. VOC emissions occur from fuel spilled during the transport of PFCs.

3. VOC emissions during storage due to temperature fluctuations. Diurnal VOC emissions result when fuel vapors escape into the air through any possible openings while the container is subjected to the daily cycle of increasing and decreasing ambient temperatures.

4. VOC emissions during storage due to permeation. Fuel stored long enough in a plastic container can eventually result in fuel molecules infiltrating and saturating the container material, allowing VOC emissions to escape through the walls of the container.

5. VOC emissions occurring while dispensing fuel from PFCs. Vapor displacement emissions result when fuel vapor is displaced from equipment being refueled. VOC emissions also result from fuel spilled during refueling with PFCs.

VOC emissions from PFCs in Indiana are estimated by the U.S. EPA to be 6,375 tons per year as of 2005. Approximately two-thirds of total VOC emission from PFCs are comprised of diurnal emissions.

The California Air Resources Board (CARB) adopted a rule on September 11, 2000, regulating PFCs sold in California. All PFCs sold in California after January 1, 2001, are required to have the following features to reduce potential VOC emissions:

1. Spill-proof container and spout design.
2. Automatic shut-off feature to prevent overfilling.
3. Automatic closing feature to ensure the container is sealed when not in use.
4. Secondary ventilation hole eliminated.
5. New plastics to reduce vapor permeation through container walls.

CARB estimates that these standards will reduce VOC emissions from PFCs by 75 percent. This VOC emission reduction estimate is based in part on an assumption that the average useful life of a PFC is five years, and that as preregulation containers wear out, are lost, or damaged, they will be replaced with the new compliant PFCs.

Delaware, Maine, Maryland, Pennsylvania, New York, Connecticut, Massachusetts, New Jersey, Rhode Island, Vermont, Virginia, Washington D.C., and Texas have all adopted PFC regulations modeled after the California rule.

In 2005, CARB amended their original PFC regulation to address problems identified with the original program. The amendments included a provision to address the potential use of kerosene containers and utility jugs as fuel storage containers. The 2005 amendments also addressed consumer concerns about spillage resulting from the automatic shut-off spout design requirements.

In the March 29, 2006, Federal Register (71 FR 15803), the U.S. EPA published a proposed national regulation to reduce hazardous air pollutant emissions from mobile sources. As part of this proposed mobile sources rule, U.S. EPA proposed standards that would limit VOC emissions from PFCs. The requirements of the proposed federal program are very similar to the recently revised California program. Rather than requiring physical design specifications, the U.S. EPA proposes a federal standard limiting evaporation and permeation of VOCs from PFCs to 0.3 grams/gallon/day. In comparison, the CARB rule maintains a 0.4 grams/gallon/day VOC emission limit.

Federal requirements of the proposed national regulation would apply to PFCs manufactured on or after January 1, 2009. U.S. EPA expects that manufacturers will be able to meet both U.S. EPA and CARB requirements with a single product for sale in all 50 states. U.S. EPA expects very little difference in the long term emission reductions provided by the federal program and those provided by the CARB program.

This rulemaking will consider implementation of a PFC VOC emission reduction program based on CARB's program. In combination with similar efforts in other MRPO states, this rule will reduce VOC emissions from PFCs in Indiana and will contribute to a regional control of VOC that will assist many counties in the MRPO states to reach and maintain attainment with the 8-hour ozone standard. A rule based on either CARB's program or on the proposed EPA rule would apply to manufacturers, dealers, and retailers manufacturing, distributing, and selling PFCs in Indiana.

Neither the CARB program nor the proposed EPA rule would require Indiana residents to discontinue the use of existing noncompliant PFCs. Compliance with new standards for owners of existing PFCs is voluntary; 100% compliance will only be achieved through attrition as pre-regulation containers wear out, are lost, or damaged, and are replaced with the new compliant PFCs.

Upon completion of this rule, it will be submitted to U.S. EPA for approval into the SIP and, along with other regional and state measures, will guide air pollution control efforts in Indiana.

Alternatives To Be Considered Within the Rulemaking

Alternative 1. Adopt a rule modeled after California's PFC VOC emission reduction program.

- Is this alternative an incorporation of federal standards, either by reference or full text incorporation? No.
- Is this alternative imposed by federal law or is there a comparable federal law? No, however a comparable federal law is under consideration. In the March 29, 2006, Federal Register (71 FR 15803), the U.S. EPA published a proposed national regulation to reduce hazardous air pollutant emissions from mobile sources. As part of this proposed mobile sources rule, U.S. EPA proposed standards that would limit VOC emissions from PFCs. If the U.S. EPA's federal rulemaking becomes effective after the adoption of a rule modeled after

California's PFC VOC emission reduction program, an additional state rulemaking will be necessary to ensure state consistency with the federal program.

- If it is a federal requirement, is it different from federal law? Not applicable.
- If it is different, describe the differences. Not applicable.

Alternative 2. Adopt a rule based on the U.S. EPA proposed national regulation.

- Is this alternative an incorporation of federal standards, either by reference or full text incorporation? No.
- Is this alternative imposed by federal law or is there a comparable federal law? A comparable federal law is under consideration. In the March 29, 2006, Federal Register (71 FR 15803), the U.S. EPA published a proposed national regulation to reduce hazardous air pollutant emissions from mobile sources. As part of this proposed mobile sources rule, U.S. EPA proposed standards that would limit VOC emissions from PFCs.
- If it is a federal requirement, is it different from federal law? Not applicable.
- If it is different, describe the differences. Not applicable.

Alternative 3. No action.

- Is this alternative an incorporation of federal standards, either by reference or full text incorporation? No.
- Is this alternative imposed by federal law or is there a comparable federal law? No. However, there is a proposed national regulation that, if adopted, will take effect in Indiana if this rulemaking does not proceed.
- If it is a federal requirement, is it different from federal law? Not applicable.
- If it is different, describe the differences. Not applicable.

Applicable Federal Law

In the March 29, 2006, Federal Register (71 FR 15803), the U.S. EPA published a proposed national regulation to reduce hazardous air pollutant emissions from mobile sources. As part of this proposed mobile sources rule, U.S. EPA proposed standards that would limit VOC emissions from PFCs.

VOC emissions reductions will be realized sooner if PFC standards are adopted at the state level, as has already been done in 13 other states and in the District of Columbia. At this time, it is uncertain how long the proposed federal PFC rule will be under consideration prior to an effective date for the federal rule.

Potential Fiscal Impact

Analysis of costs related to a rule modeled after California's PFC VOC emission reduction program is derived from U.S. EPA's February 2006 document titled "Draft Regulatory Impact Analysis: Control of Hazardous Air Pollutants from Mobile Sources". Chapter 10: Gas Can Costs outlines projected PFC costs related to meeting U.S. EPA's proposed federal emissions standards. Because California's revised program is essentially equivalent to the proposed federal requirements, U.S. EPA expects that manufacturers will be able to meet the requirements of both programs with a single gas can design that can be sold under either regulatory scheme.

Potential Fiscal Impact of Alternative 1. This alternative is expected to have a minimal net fiscal impact. U.S. EPA's cost analysis focuses on costs associated with the production of multilayer gas cans, as U.S. EPA believes that most manufacturers will continue using this technology, which meets current California PFC standards. The weighted average cost per gas can for one, two, and five gallon containers is estimated at $2.69 per can in additional cost as compared to the production cost of uncontrolled PFCs. U.S. EPA predicts that at an average life of five years for a gas can, 20.5 pounds of VOC emissions are reduced per PFC, resulting in fuel savings of 3.4 gallons. Fuel savings of 3.4 gallons per PFC results in discounted savings of $4.24, more than an offset of the cost of controls. If the U.S. EPA's draft rule becomes final, then this alternative will likely have no fiscal impact beyond those caused by the federal requirements.

Potential Fiscal Impact of Alternative 2. This alternative is expected to have a minimal fiscal impact for the same reasons outlined under the Potential Fiscal Impact of Alternative 1. If the U.S. EPA's draft rule becomes final, then this alternative will have no fiscal impact beyond those caused by the federal requirements.

Potential Fiscal Impact of Alternative 3. No fiscal impact.

Small Business Assistance Information

IDEM established a compliance and technical assistance (CTAP) program under IC 13-28-3. The program provides assistance to small businesses and information regarding compliance with environmental regulations. In accordance with IC 13-28-3 and IC 13-28-5, there is a small business assistance program ombudsman to provide a point of contact for small businesses affected by environmental regulations. Information on the CTAP program, the monthly CTAP newsletter, and other resources available can be found at www.in.gov/idem/compliance/ctap/index.html.

Small businesses affected by this rulemaking may contact the Small Business Regulatory Coordinator:

Sandra El-Yusuf
IDEM Compliance and Technical Assistance Program
OPPTA - MC60-04
100 N. Senate Avenue
W-041
Indianapolis, IN 46204-2251
(317) 232-8578

selyusuf@idem.in.gov

The Small Business Assistance Program Ombudsman is:

Stacey Pfeffer
IDEM Office of Voluntary Compliance
OPPTA - MC60-04
100 N. Senate Avenue, W-041
Indianapolis, IN 46204-2251
(317) 233-5624
spfeffer@idem.in.gov

Public Participation and Workgroup Information

At this time, no workgroup is planned for the rulemaking. If you feel that a workgroup or other informal discussion on the rule is appropriate, please contact Sean Gorman, Rules Development Section, Office of Air at (317) 234-3533 or (800) 451-6027 (in Indiana).

STATUTORY AND REGULATORY REQUIREMENTS

IC 13-14-8-4 requires the board to consider the following factors in promulgating rules:

(1) All existing physical conditions and the character of the area affected.

(2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.

(3) Zoning classifications.

(4) The nature of the existing air quality or existing water quality, as the case may be.

(5) Technical feasibility, including the quality conditions that could reasonably be achieved through coordinated control of all factors affecting the quality.

(6) Economic reasonableness of measuring or reducing any particular type of pollution.

(7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to human, plant, animal, or aquatic life or to the reasonable enjoyment of life and property.

REQUEST FOR PUBLIC COMMENTS

At this time, IDEM solicits the following:

(1) The submission of alternative ways to achieve the purpose of the rule.

(2) The submission of suggestions for the development of draft rule language.

Mailed comments should be addressed to:

#07-89(APCB) Portable Fuel Containers
Sean Gorman Mail Code 61-50
c/o Administrative Assistant
Rules Development Section
Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204.

Hand delivered comments will be accepted by the IDEM receptionist on duty at the tenth floor reception desk, Office of Air Quality, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana.

Comments may be submitted by facsimile at the IDEM fax number: (317) 233-2342, Monday through Friday, between 8:15 a.m. and 4:45 p.m. Please confirm the timely receipt of faxed comments by calling the Rules Section at (317) 233-0426.

COMMENT PERIOD DEADLINE

Comments must be postmarked, faxed, or hand delivered by March 23, 2007.

Additional information regarding this action may be obtained from Sean Gorman, Rules Development Section, Office of Air Quality, (317) 234-3533 or (800) 451-6027 (in Indiana).

Kathryn A. Watson, Chief
Air Programs Branch
Office of Air Quality

Posted: 02/21/2007 by Legislative Services Agency
An html version of this document.